CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 77-140

WASTE DISCHARGE REQUIREMENTS FOR:

ELMER MARTINELLI
WEST MARIN SANITARY LANDFILL
POINT REYES STATION
MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Mr. Elmer Martinelli, hereinafter called the discharger, submitted a Report of Waste Discharge for the West Marin Sanitary Landfill dated February 21, 1975. In addition, an engineering report dated July 1975 and a technical report entitled "Septic Tank Waste Ponds" dated August 26, 1977, have been submitted for this disposal site.

2. The discharger currently disposes of Group 2 and Group 3 wastes at the West Marin Sanitary Landfill site which he owns. In addition, the discharger proposes to handle, treat, and dispose of septic tank pumping and sewage sludge at the site. The disposal site is located about one and one quarter miles northeast of Point Reyes Station, as shown in Attachment A, which is incorporated herein and made a part of this Order.

3. The West Marin Sanitary Landfill site is located in a narrow blind canyon adjacent to Tomasini Creek, a tributary to Tomales Bay. At present, the existing solid waste disposal area of approximately 50 acres is located east of Tomasini Creek in the canyon. The discharger proposes to receive septic tank pumpings into ponds, the supernatant from which will be applied to cultivated land by spraying. Sludge from the ponds and limited quantities of digested sludge and other high moisture content waste will be disposed of with group 2 and 3 wastes on the site.

4. The site is underlain by a considerable thickness of impermeable sandy clay and clayey gravel. Useable groundwaters beneath the site are protected by impervious clayey strata. Storm runoff and spring waters are intercepted and diverted around the solid waste disposal area.

5. Subsequent to the modifications necessary to comply with this Order, this disposal site will meet the criteria contained in the California Administrative Code, Title 23, Chapter 3, Subchapter 15, for classification of a portion of the site as a Class II-2 disposal site to receive Group 2 and 3 wastes.

6. The beneficial uses of Tomasini Creek and Tomales Bay are:

   a. Recreation
   b. Fish migration and habitat
   c. Habitat and resting for waterfowl and migratory birds
   d. Shellfish harvesting
   e. Esthetic enjoyment

7. The land within 1000 feet of the site is used for cattle grazing, general open space, and residential.

8. The Board adopted a Water Quality Control Plan for the San Francisco Bay Basin in April 1975 and this Order implements the water quality objectives stated in that plan.

9. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

10. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

11. This project involves the continued operation of a privately owned Class II-2 facility with minor alteration to the land. Consequently, this project will not have a significant effect on the environment based upon the exemption provided in Section 15101, Title 14, California Administrative Code.

IT IS HEREBY ORDERED THAT West Marin Sanitary Landfill and any other person who operates this site, shall comply with the following:

A. Specifications for Solid Waste Disposal Site

1. The disposal of waste shall not cause pollution or a nuisance.

2. Group 2 wastes shall not be placed in or allowed to contact ponded water from any source whatsoever.

3. Group 1 wastes shall not be stored or deposited at this site.

4. Waste materials shall not be disposed of in any location where they can be carried from the disposal site and discharged into waters of the State.

5. The disposal of high moisture content wastes or sewage sludge with group 2 wastes shall be limited to 10,000 gallons per week.

6. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.

B. Leachate and Drainage Specifications for Solid Waste Disposal Site

1. Leachate from Group 2 wastes or ponded water containing leachate shall not be discharged to waters of the State. Water used during disposal site operations shall be limited to a minimal amount reasonably necessary for purposes of dust control and fire suppression.

2. The site shall be protected from any washout or erosion of wastes or covering material, and from inundation, which could occur as a result of floods having a predicted frequency of once in 100 years.

3. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources shall not contact or percolate through Group 2 wastes deposited during the active life of the site.

4. Vertical and lateral hydraulic continuity with surface and groundwaters shall be prevented by the presence of a natural clay barrier of at least five feet in thickness and a permeability of 1×10^{-6} cm/sec or less on the bottom and sides of disposal areas. If such a natural condition does not exist, an artificial barrier shall be constructed to meet the above specification.

5. During the winter months when precipitation can be expected, impervious covers shall be maintained over all but the active disposal area. The disposal activity shall be confined to the smallest area possible based upon anticipated quantity of wastes and operational procedures.

6. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:

   a. Surface water;

      Floating, suspended, or deposited macroscopic particulate matter or foam;

      Bottom deposits or aquatic growths;

      Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

      Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

   b. Groundwater

      The useable groundwater shall not be degraded as a result of the solid waste disposal operation.

7. The migration of methane gas from group 2 wastes shall be controlled as necessary to prevent creation of a nuisance.

C. Septic Tank Waste Ponds and Irrigation Area Specifications

1. The ponding or disposal of waste shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. Waste ponds and spray disposal areas shall be used only for septic tank pumpings or other wastes of sewage origin unless written authorization is received from the Executive Officer. Group 1 wastes shall not be accepted under any conditions.

3. Ponding and spray disposal of high moisture content wastes shall take place only within the area shown on Attachment A unless written authorization is received from the Executive Officer.

4. Runoff of wastes to Tomasini Creek from the spray disposal area is prohibited. A 100 foot setback shall be maintained between the creek and all ponds or spray areas.

5. Waste ponds shall be protected from any washout or erosion of wastes or covering material, and from inundation, which could occur as a result of floods having a predicted frequency of once in 100 years. Annually, prior to the anticipated rainfall period, all necessary surface drainage control measures shall be taken to prevent erosion or flooding of ponds.

6. The discharge of waste shall not cause seepage to be present any place outside the ponds.

7. The sides and bottom of the ponds shall be sealed with a minimum of 3 feet of impervious material to achieve 95 percent compaction. The construction of the ponds shall be supervised by a registered civil engineer.

8. A one hundred foot setback shall be provided from Tomasini Creek to the pond berms.

9. The discharger shall remove any wastes which are discharged at this site in violation of the above specifications.

10. Spraying of wastewater from the ponds is prohibited when rainfall is anticipated or within 72 hours after any rainfall, or at times when soils are saturated.

11. Dairy cattle are prohibited from grazing on the areas irrigated with wastewater.

12. A minimum of two feet of freeboard shall be maintained in the septic waste ponds at all times.

13. The irrigation area, and all equipment, including such items as pumps, pipes, and valves which may at any time contain waste, shall be adequately and clearly identified with warning signs to indicate they contain sewage waste which is unfit for human contact.

D. Provisions

1. The discharger shall comply with all sections of this Order immediately upon adoption.

2. Disposal of septic tank wastes or high moisture content wastes in the proposed ponds and irrigation area shall not commence until the Executive Officer agrees in writing that the necessary measures have been taken to comply with the waste discharge requirements. This approval shall be based on documentation prepared by a registered engineer that the ponds and irrigation areas meet all applicable specifications of this Order.

3. No later than March 15, 1978, the discharger shall submit to the Regional Board a site operation manual. The manual shall include site management, construction and maintenance of access roads and perimeter ditches, methods for deposition, compaction and covering of wastes, site maintenance, and other operational procedures.

4. This Board considers the property owner to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge or water applied to this property during subsequent use of the land for other purposes.

5. The discharger shall file with the Board technical reports on self-monitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Program which may be directed by the Executive Officer.

6. The discharger shall maintain a copy of the Order at the site so as to be available at all times to site operating personnel.

7. One hundred and eighty (180) days prior to discontinuing use of any major phase of this site for waste disposal, the discharger shall submit a technical report to the Board describing the methods and controls used to assure protection of the quality of surface and groundwaters of the area during final operations and during any subsequent use of the land. This report shall be prepared by or under the supervision of a registered engineer or a certified engineering geologist. The method used to close the site and maintain protection of the quality of the surface and groundwaters shall comply with waste discharge requirements established by the Regional Board.

8. The discharger shall permit the Regional Board:

(a) Entry upon premises on which waste are located or in which any required records are kept,

(b) Access to copy any records required to be kept under terms and conditions of this Order,

(c) Inspection of monitoring equipment or records, and

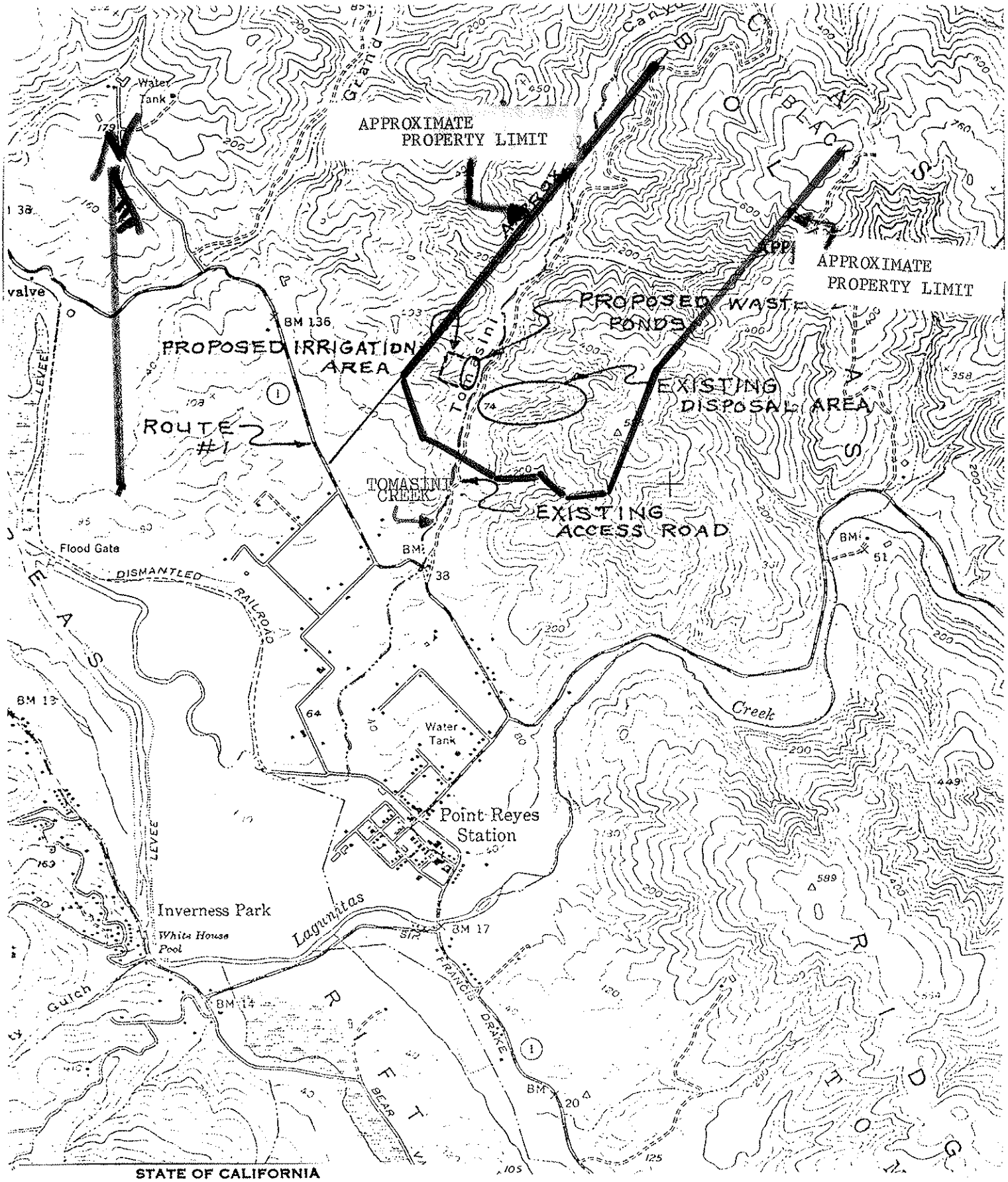
(d) Sampling of any discharge.

9. The discharger shall file with this Board a report of any material change or proposed change in the character, location or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries or contours of the disposal area(s).

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on November 15, 1977.

FRED H. DIERKER
Executive Officer

Attachment:
A - Map
Self-Monitoring Program



STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

WEST MARIN SANITARY LANDFILL
POINT REYES STATION, MARIN COUNTY
LOCATION OF SOLID WASTE DISPOSAL SITE,
AND IRRIGATION AREA AND WASTE PONDS.
ATTACHMENT "A" ORDER NO. 77-140

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

WEST MARIN SANITARY LANDFILL
POINT REYES STATION
MARIN COUNTY

PART A

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the latest edition of Standard Methods for the Examination of Water and Wastewater prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, or other methods approved and specified by the Executive Officer of this Regional Board including the methods specified in attached APPENDIX E.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health or a laboratory approved by the Executive Officer. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. Grab sample means a sample collected at any time.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

West Marin Sanitary Landfill

Pt. Reyes Station

Marin County

ORDER NO. 77-140

CONSISTS OF

PART A

AND

PART B

2. Standard Observations

a. Receiving Water Tomasini Creek & Tomales Bay

(1) Discoloration and turbidity: description of color, source, and size of affected area.

(2) Odor: presence or absence, characterization, source, and distance of travel.

(3) Evidence of beneficial water use: presence of water-associated wildlife, fishermen, and other recreational activities in the vicinity of the sampling stations.

(4) Hydrographic condition:

(a) Water and sampling depths.

(5) Weather condition:

(a) Wind - direction and estimated velocity.
(b) Precipitation - total precipitation during the previous five days and on the day of observation.

b. Land Retention or Disposal Area

This applies both to liquid and solid wastes confined or unconfined.

(1) Determine height of the freeboard at lowest point of dikes confining liquid wastes.

(2) Evidence of leaching liquid from area of confinement and estimated size of affected area. (Show affected area on a sketch.)

(3) Odor: presence or absence, characterization, source, and distance of travel.

(4) Estimated number of waterfowl and other water-associated birds in the disposal area and vicinity.

D. SCHEDULE OF SAMPLING, ANALYSES, AND OBSERVATIONS

The discharger is required to perform observations, sampling, and analyses according to the schedule in Part B with the following conditions:

E. RECORDS TO BE MAINTAINED

1. Written records shall be maintained at the landfill site or office and shall be retained for a minimum of 3 years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board. Such records shall show the following for each sample:

a. Identity of sampling and observation stations by number.

b. Date and time of sampling and/or observations.

c. Date and time that analyses are started and completed, and name of personnel performing the analyses.

d. Complete procedure used, including method of preserving sample and identity and volumes of reagents used. A reference to specific section of Standard Methods is satisfactory.

e. Calculations of results.

f. Results of analyses and/or observations.

F. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Written reports shall be filed for each calendar month (unless specified otherwise in Part B) by the fifteenth day of the following month. In addition, an annual report shall be filed as indicated in F-1-f. The reports shall be comprised of the following:

a. Letter of Transmittal:

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include a discussion of requirement violations found during the past month and actions taken or planned for correcting violations, such as plant operation modifications and/or plant facilities expansion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

Monitoring reports shall be signed as follows:

(1) In the case of corporations, by a principal executive officer at the level of vice-president or his duly authorized representative if such representative is responsible for the overall operation of the facility from which the discharge originates,

(2) In the case of a partnership, by a general partner, or

(3) In the case of a sole proprietorship, by the proprietor,

(4) In the case of a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

b. Compliance Evaluation Summary

Each report shall be accompanied by a compliance evaluation summary sheet prepared by the discharger. The report format will be specified by the Regional Board.

c. Map or Aerial Photograph

A map or aerial photograph shall accompany the report showing sampling and observation station locations.

d. Results of Analyses and Observations

Tabulations of the results from each required analysis specified in Part B by date, time, type of sample, and station, signed by the laboratory director. The report format will be specified by the Regional Board.

e. List of Approved Analyses

(1) Listing of analyses for which the discharger is approved by the State Department of Health.

(2) List of analyses performed for the discharger by another approved laboratory (and copies of reports signed by the laboratory director of that laboratory shall also be submitted as part of the report).

f. Annual Reporting

By January 15 of each year, the discharger shall submit an annual report to the Regional Board covering the previous calendar year. The report shall contain:

1. Tabular and graphical summaries of the monitoring data obtained during the previous year.

2. Comprehensive discussion of the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.

3. A map showing the area in which filling has been completed during prior calendar year.

PART B

I. DESCRIPTION OF SAMPLING STATIONS & SCHEDULE OF SAMPLING, ANALYSES & OBSERVATIONS

A. WASTE MONITORING

1. Monthly, record the total volume and weight of a refuse (in cubic yards and tons) deposited on the site during the month, and the daily average. Report quarterly.

2. Monthly, record the volume of fill completed, in place of cubic yards, showing the location(s) and dimensions on a sketch or a map. Report quarterly.

3. Monthly, record the volume of septic tank waste deposited in waste ponds during the month and the daily average. Report quarterly.

(The report record shall be maintained at the landfill office. Weight of the refuse shall be estimated and reported quarterly.)

B. ON SITE OBSERVATION

Station	Description
S-1 thru S-'n'	Observation stations located on presently active area or completed portion of the solid waste disposal site at grid squares delineated by 500 foot grid network.
P-1 thru P-'n'	These stations shall be located at each corner of waste ponds.

Station	Frequency of Observation	Observations
All S Stations in active disposal areas	Weekly throughout the year	1. Evidence of ponded water at any point on the disposal site. 2. Evidence of refuse not confined within a cell or parcel. 3. Evidence of erosion and/or "day-lighted" refuse. 4. Evidence of waste in contact with pools of surface water. 5. Evidence of leachate leaving the disposal site, and estimated size of affected area.

Station	Frequency of Observation	Observations
All P Stations	Weekly throughout the year	1. Evidence of seepage from the ponds. 2. Evidence of odors presence or absence, characteristics, intensity source and distance of travel. 3. Free board

All "P" and "S" stations must be monitored according to the above described frequency and report quarterly.

C. SEEPAGE AND/OR LEACHATE MONITORING

Station	Description
L-1 thru L-'n'	At a point in each discharge point from the disposal area(s) and at the point where liquid leaves the discharger's property. Include a map indicating locations of discharge(s).

Station	Type of Sample and Frequency	Analyses	Units
All L Stations	Grab sample daily during each discharge or occurrence	COD	mg/l
		Dissolved sulfide	mg/l
		Odors	description
		Color	description
		pH	electrometric units
		Total Coliform	MPN/100 ml

A report shall be made by telephone of any seepage or leachate leaving the property immediately after occurrence. A written report shall be filed with this Board within 5 days and shall contain the following information: 1)Map showing location(s) of discharge, 2)flow rate, 3)nature of effect (i.e. discoloration of receiving water, size of affected area), and 4)corrective measures undertaken.

D. GROUNDWATER MONITORING

G-1 A groundwater monitoring well located 50 feet downstream of the existing leachate control facility, the depth shall be as deep as necessary to determine the level of subsurface water nearest to the ground surface. The well shall be perforated and have a minimum diameter of four (4) inches.

E. TYPE OF SAMPLING AND ANALYSES

Station	Type of Sample and Frequency	Analyses	Units
G-1 Station	Grab sample quarterly throughout year	Color	visual
		water level	feet
		chloride	mg/l
		COD	mg/l
		pH	electrometric
		Total dissolved Solids (TDS)	mg/l
		Nitrate Nitrogen as N	mg/l
		Electrical Conductivity	micromhos/cm
		Total Kjeldahl nitrogen (as N)	mg/l

G-1 station shall be reviewed after one year of analyses.

Prior to taking grab samples of the "G" well, the wells water must be pumped minimum of two minutes.

I, Fred H. Dierker, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in the Regional Board Order No. 77-140.

2. Has been ordered in writing by the Executive Officer on November 15, 1977, and becomes effective immediately.

3. May be reviewed at any time subsequent to the effective date upon written notice from either the Executive Officer or the discharger and will be revised upon written agreement of the Executive Officer and the discharger.

FRED H. DIERKER
Executive Officer

Attachment:
Appendix E